

## History

In 1946, the first woman was irrigator on the initiative of T.A. Kolpakova, the Faculty of "construction of small and medium hydroelectric power plants" was established and later operated under the names of the Faculty of "hydropower construction", "construction of hydrotechnical structures and GES on the river", "water farm construction" in 1991-1996, "construction and use of irrigation hydrotechnical structures" in 1996-2004, "construction and use of hydrotechnical structures" in 2004-2015. The Tashkent Institute of irrigation and melioration was transformed into the Tashkent Institute of irrigation and agricultural mechanization engineers by the decision of the president of the Republic of Uzbekistan No. PQ-3003 of May 24, 2017, and the faculty was given the name "hydropower construction". During the past time, associate professors of faculty activity L.I. Antonova, P.B. Arakelov, professors M.R. Bakiyev, A.A. Yangiyev, T.Z. Sultanov was in charge. As of January 2012, the dean of the faculty is Prof. B.B. Khasanov is active. The faculty for the construction and energy system of the national economy of the Republic and former Union republics, including water management, has prepared about 7,000 qualified specialists for 77 years of activity, and more than 100 for foreign countries. Graduates of the faculty have passed production practices in the construction of Sayano-Shushinsk, Bratsk, Toktogul, Nurek, Ust-Ilimsk, Chorvoq hydroelectrostands, Andijan, Tolimarjon, Hisorak reservoirs, camel-Moose, Cannon hydrozels. Currently, they operate in the above-mentioned facilities and other water management and hydropower system facilities of our republic, in the operation of large hydro-technical facilities, in basin departments, in water management construction organizations, in the pumping station departments of the regions. Since the academic year 2021/2022, it has been established to conduct production practices at the faculty in small groups at production enterprises and construction facilities operating in the fields of water management and hydropower, and with the organization of international student construction teams "Young Builders". In particular, the students of the faculty were in production practices in large and unique constructions in the Republic in the objects "construction of the toilet reservoir and the HES", "construction of the Pskom HES", "construction of the lower Chotqol HES".

### **Preparation of bachelors and masters in the fields of knowledge and education**

By the decree of the president of the Republic of Uzbekistan dated December 10, 2021 "on measures to radically improve the system of training of engineering personnel for economic sectors on the basis of innovation and digitization" No. 42, the institute was named the National Research University "Tashkent Institute of irrigation and agricultural mechanization engineers" and was named "hydropower structures and engineering structures", "pumping stations, in the departments named" construction organization and technology", "engineering graphics and design theory", 700,000-in the field of Knowledge" Engineering, processing and construction areas", "hydropower construction (by type) "in the direction of undergraduate education and" hydrotechnical structures (in water management)", "organization and technology of construction of hydrotechnical structures "in the master's specialties and" hydropower" in the educational direction; 800,000-"use of hydraulic structures and pumping stations" in the field of knowledge "rural, forest, fish farming and veterinary", "hydropower facilities in irrigation systems "in undergraduate educational areas and" use of hydraulic structures, their reliability and safety", "use and diagnosis of pumping stations and devices", "construction and use of HES" in graduate specialties; 500,000-in the field of knowledge in the direction of undergraduate education "mechanics and mathematical modeling" in the field of "natural sciences, mathematics and statistics"; 100,000-in the field of knowledge, training of personnel in the master's specialty "engineering graphics and design theory" in "education" was established.

### **Scientific research work**

In order to ensure the implementation of the tasks set by the decree of the president of the Republic of Uzbekistan dated July 10, 2020, PF-6024 "on approval of the concept of water development of the Republic of Uzbekistan in 2020-2030", research work will be carried out at the faculty. General topic: "improvement,

calculation, design and development" at the Department of "hydraulic structures and engineering structures", "development of the basics of methods for calculating and designing hydraulic structures and reliable and safe use using digital technologies"; "development of recommendations for improving the efficiency of the use of hydraulic structures, large and medium pumping stations in the Republic, introducing resource technologies" ; "mechanics and computer modeling" , "developing the theory and method of assessing the strength, reliability of grunt dams, taking into account grunt moisture and non-linear filtering" "Theoretical and experimental justification of the technology of symmetrical concrete objects in relation to the axis "in the Department of" construction organization and technology";" application of geometric modeling methods in the design of hydraulic structures "in the Department of "engineering graphics and design theory".

### **Results of international scientific conferences**

In April 2019, national studies were held at the International Scientific Conference FORM-2019, held in cooperation with the Moscow State Construction University, 41, in April 2020-CONMECHYDRO, held in cooperation with the St. Petersburg Polytechnic University named after Peter The Great - 175 at the 2020 international scientific conference, 44 at the form-2020 International Scientific Conference in cooperation with Moscow State Construction University in Vietnam in September 2020, 54 at the IPICSE-2020 international scientific conference in cooperation with Moscow State Construction University in November 2020, 87 at the CONMECHYDRO-2021 international scientific conference in September 2021, 110 at the CONMECHYDRO-2022 international scientific conference, 117 at the 2023 international scientific conference, 55 at the form-2023 International Scientific Conference, in total, about 700 scientific articles on the University were published in publishing houses registered in the Scopus rating base.

### **Foreign partner organizations and universities**

Germany's "Eberswalde University "and" Berlin Technical University", Austria's" Felder Group "and" Vienna Technical University", China's" Hohai University "and" Shenzhen technology university", Russia's" National Research Moscow State Construction University "and "St. Petersburg Polytechnic University named after Peter The Great" , Belarus's "Belarusian National Technical University" and "Belarus State agrarian-Technical University" , Kazakhstan's "M.State univetsitet of South-Kazakhstan named after Auezov"

### **Local partner organizations and universities**

Organizations and production facilities within the Ministry of water resources of the Republic of Uzbekistan, organizations and production facilities within the Ministry of construction and housing of the Republic of Uzbekistan, organizations and production enterprises within the Joint-Stock Company "Uzbekgidroenergo" , Joint-Stock Company "Hydroproekt", project institutes "UzGIP" and "Uzuvloyiha" , Inspectorate "Davsuvxo'jaliknazorat" , "Institute of seismic strength of its own FA mechanics and structures" , "Tashkent architectural and Construction University" , "Tashkent State Technical University named after Islam Karimov" , "Tashkent State transport University".